

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

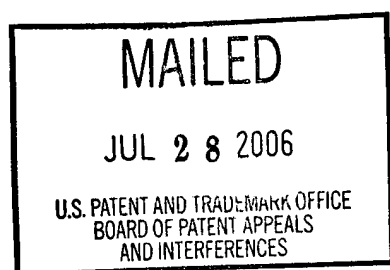
## UNITED STATES PATENT AND TRADEMARK OFFICE

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### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte VAHAN AVETISIAN, PAUL BERG, ROBERT RENZ and GEORGE KARLOFF



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Appeal No. 2006-0821  
Application No. 09/733,813

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ON BRIEF

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Before OWENS, CRAWFORD, and LEVY, Administrative Patent Judges.  
CRAWFORD, Administrative Patent Judge.

### DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 5, 7 to 13, 15, 16, 19, 20, and 26 to 29, which are all of the claims pending in this application. Claims 6, 14, 17, 18 and 21 to 25 have been cancelled.

The appellants' invention relates to a pyrotechnic initiator having an integral, unitary, overmolded body (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

|                                |           |               |
|--------------------------------|-----------|---------------|
| Taylor et al. (Taylor)         | 2,741,179 | Apr. 10, 1956 |
| Seavey                         | 2,968,985 | Jan. 24, 1961 |
| Craig et al. (Craig)           | 3,906,858 | Sep. 23, 1975 |
| Refouvelet et al. (Refouvelet) | 5,576,509 | Nov. 19, 1996 |
| Hansen et al. (Hansen)         | 5,932,832 | Aug. 3, 1999  |
| Swann et al. (Swann)           | 6,295,935 | Oct. 2, 2001  |

The rejections

Claims 1 to 5, 8 to 11, 26 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over Refouvelet in view of Taylor.

Claims 1 to 5, 8 to 11, 26 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over Refouvelet in view of Craig.

Claims 7 and 28 stand rejected under 35 U.S.C. § 103 as being unpatentable over Refouvelet and either Taylor or Craig in view of Hansen.

Claims 12, 13 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Refouvelet and either Taylor or Craig in view of Swann.

Claims 15, 16 and 29 stand rejected under 35 U.S.C. § 103 as being unpatentable over Refouvelet and Taylor or Craig and Swann in view of Seavey. Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (mailed August 03, 2005) for the examiner's complete reasoning in support of the rejections, and to the brief (filed May 19, 2005) for the appellants' arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We will not address the appellants argument regarding the propriety of the final rejection because questions regarding the propriety or prematurity of the examiner's final rejection are petitionable to the Commissioner under 37 CFR § 1.181. Therefore, we do not have jurisdiction over the propriety of an examiner's action being made final. See MPEP § 706.07(c).

We turn first to the examiner's rejection of claims 1 to 5, 8 to 11, 26 and 27. We initially note that the test for obviousness is what the combined teachings of the

references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

It is the examiner's view that Refouvelet describes the invention as described in claim 1 except that Refouvelet does not describe an electrically nonconductive molded body surrounding substantially all of the initiator subassembly except for an exposed ~~the~~ connector end. The examiner relies on Taylor for teaching that it is old and well known in the art to substantially surround all of the initiator/detonator subassembly.

The examiner concludes:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to extend the pre-existing integral and unitary molded plastic body 10 of Refouvelet et al. embodiment in figure 1 such that it surrounded substantially all of the initiator subassembly of the Refouvelet et al. initiator to form an electrically-non-conductive protective casing therefor, in view of the teachings of Taylor et al.. ...[answer at pages 4 to 5].

Refouvelet describes and depicts in Figure 1, a detonator that includes a insulating molding material 10 surrounding a portion of the detonator. Refouvelet also describes another embodiment of the detonator, which is depicted in Figure 2, and

which includes an insulating molding material covering a portion of the detonator, as in the first embodiment, but also a plug 16 made of the same insulating molding material, welded onto element 10, and closing the casing 3 (col. 4, lines 25 to 29). As such, Refouvelet suggests that when substantially all of the detonator is covered by the insulating material it is done by securing two pieces together.

The appellants argue that the teachings of Refouvelet and Taylor can not be combined in the manner proposed by the examiner and that there would be no motivation to do so. In support of this position, the appellants have filed a declaration executed by Vahan Avetisian who is one of the inventors. This declaration states:

. . . because the open-ended/non-hermetic upper end of the Refouvelet initiator teaches away from the possibility of molding a body in that region (i.e., providing an "overmolded" body) - the adjacent charge would present an undue hazard of auto-ignition under the heat and pressure of the process. The fact that Refouvelet's Fig. 2 embodiment shows a two-piece non-unitary, non-integral body further precludes such an implication. [paragraph 4 of the declaration].

We agree with the appellants that one of ordinary skill in the art would not be motivated by the teachings of Refouvelet and Taylor to mold an insulator over the substantially the entire detonator of Refouvelet as such molding process would create an explosion danger due to the heat and pressure involved in the process.

In view of the foregoing, we will not sustain this rejection.

We turn next to the examiner's rejection of claims 1 to 5, 8 to 11, 26 and 27 under 35 U.S.C. § 103 as being unpatentable over Refouvelet in view of Craig. Craig is relied on by the examiner for teaching a nonconductive molded body surrounding substantially all of the initiator. The examiner concludes:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to extend the pre-existing integral and unitary molded plastic body 10 of Refouvelet et al. embodiment in figure 1, such that it surrounded substantially all of the initiator subassembly of the Refouvelet et al. initiator to form an electrically-non-conductive protective casing therefor, in view of the teachings of Taylor et al. as noted above. [answer at pages 4 to 5].

Craig describes an initiator that is covered by two sections (46,65) which are joined by adhesive (col. 4, lines 37 to 47; col. 5, lines 1 to 12). As such, Craig does not describe a unitary, integral molded insulation and thus would not have motivated a person of ordinary skill in the art to extend the molded insulation described in Refouvelet. This is especially true because, as is explained in the Avetisian declaration, the process to form a such unitary, integral molded insulation over the entire Refouvelet initiator would present an explosion danger.

In view of the foregoing, we will not sustain this rejection.


We will likewise not sustain the remaining rejections because each of these rejections relies on the combination of the teachings of Refouvelet and Taylor or Craig

The decision of the examiner is reversed.

*Terry J. Owens*  
TERRY J. OWENS  
Administrative Patent Judge

  
MURRIEL E. CRAWFORD  
Administrative Patent Judge

BOARD OF PATENT  
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AND  
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STUART S. LEVY  
Administrative Patent Judge

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